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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/786,466                       | 02/25/2004  | Ivan Thrall Smith    | 8274-020            | 9331             |
| 4678                             | 7590        | 03/17/2009           | EXAMINER            |                  |
| MACCORD MASON PLLC               |             |                      | CHAPMAN, JEANETTE E |                  |
| 300 N. GREENE STREET, SUITE 1600 |             |                      |                     |                  |
| P. O. BOX 2974                   |             |                      | ART UNIT            | PAPER NUMBER     |
| GREENSBORO, NC 27402             |             |                      | 3633                |                  |
|                                  |             |                      | MAIL DATE           | DELIVERY MODE    |
|                                  |             |                      | 03/17/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/786,466             | SMITH, IVAN THRALL  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Jeanette E. Chapman    | 3633                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 December 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3,5-20,22-27,29-43 and 45-48 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5-20,22-27,29-43 and 45-48 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

The amendment filed 12/4/08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: An area separation wall rated "for two hours at about 75% design load" lacks a positive antecedent basis in the original specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,12, 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. An area separation wall rated "for two hours at about 75% design load" lacks a positive antecedent basis in the original specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-20,22-27,29-43,45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Gebhardt et al (4464877) in view of Mulford (4658557) and ASTM E119-95a "Fire Test of Building Construction and Materials Limited Load Conditions (2 x 4 Wood Double Leaf Wall) and "Online Certification Directory" BXUV.U370 – FIRE RESISTANCE RATINGS ANSI/UL 263

Gebhardt et al discloses the first and second building units of occupiable space such as a residential duplex or two unit / home with a two hour first resistance fire rated area separation wall and a thermal insulation layer between the layers of the separation wall; see column 6, lines 26-42 and column 8, lines 59-64.

ASTM discloses a fire rated wall construction shown in figure 1 having an area separation wall having outer membranes of gypsum board and cellulose insulation between the outer membranes. The separation wall further includes a tying structure of the horizontal "2x4" studs shown in figure 1 and section B-B, page 18, for connecting

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said fire resistance rated, area separation wall (frrasw) to possible first and second building units as those shown by Gebhardt

Mulford discloses a fire rated wall construction having a sheathing fire rated panels 56/58, studs 40 and insulation 48 between the sheathing and the studs. Mulford further discloses a tying structure 30 possibly connecting the separation wall first and second units such as those suggested by Gebhardt. The tying structure may include a double plate assembly as shown in figure 5 with element 30 whereby the following modification for figures 6-8 includes a top plate 30 attached to the top edge of the fire resistance rated, area separation wall (frrasw) and a bottom plate 44 attached to the bottom edge of the frrasw. See figures 7 and 8 and corresponding text. The plates are less than 10 feet apart.

Gebhardt discloses that at least a two inch thick gypsum non-bearing partition will meet the requirements of a two hour fire resistance rating.

Mulford discloses an interior support structure.

Mulford discloses structurally independent interior vertical (wallboard panel) support members 46 and 50. The vertical members are spaced apart. The spacing has been considered a matter of choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 22 at about mid-height of the plurality of vertical members. Mulford discloses the vertical members

are spaced apart. The spacing has been considered a matter of choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 22 at about mid-height of the plurality of vertical members.

ASTM discloses structurally independent vertical wall board panel support member (see studs at 16" O.C in figure 1 and ASTM discloses physical gap between said structurally independent interior support members. See figure 1 of ASTM. Stucco or paint may come in a fire resistant wallboard. One of ordinary skill in the art would have appreciated the type of wallboard commensurate with the intended function and purpose of the support structure.

ASTM discloses organic thermal insulation is used for excellent insulation, mechanical strength and flame resistance. The type of organic thermal insulation has been considered a matter of choice; the selection of any one type has not been viewed as critical. No criticality has been shown for using any one type. One of ordinary skill in the art would have appreciated using any type commensurate with the intended function and purpose of the separation wall.

Regarding the limitation of the area separation wall rated for two hours at about 75% design load: The limitation lacks criticality and applicant has not shown that measurements outside the above limitation do not function. One of ordinary skill in the

art would have appreciated that a fire resistance rating varies with materials and the weight of the materials employed.

Nevertheless, the applicant cited the "Online Certification Directory" BXUV.U370 – FIRE RESISTANCE RATINGS ANSI/UL 263. In this directory, there is discloses a wallboard protection for each side of the wall having a two hour fire rating at 75% load. Further, the Online Certification Directory discloses thermal insulation 5 between outer membranes 3. One of ordinary skill in the art would have appreciated constructing an area separation wall with a two hour rating at about 75% load; further ,in view of the above, it would have been obvious to use the separation wall between the two building units having a two hour fire resistance rating at 75% design load with a tying structure between the two unit separation walls to provide an effective separation wall as shown by Mulford and ASTM and UL online Directory.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3,5-20,22-27,29-43,45-48 have been considered but are not deemed persuasive.

Applicants argues the ASTM E119-95a (the "Omega Reference") described a wall assembly that received a 2-hour rating for 47.5% of full design load, while the present inventions pertain to an improved wall assembly that received a 2-hour rating for 75% of full design load.

Applicnat argues that A separation wall with a 2-hour rating of 75% is critical because it

lends itself to use in multi-level structure, while a separation wall with a 2-hour rating of 47.5% does not. The former provides considerable structural and commercial benefits while the latter does not. This is set forth in the Declarations of Stewart and Trumbo have been submitted contemporaneously with this Response. Nevertheless the UL ONline Certification Directory makes these declarations moot by disclosing the sheathing 3 and stud 1 with cellulose insulation 5 therebetween having top and bottom plates and having a two hour fire rating at 75% design load. The Omega reference and Mulford teaches the tying structure.

Further the declaration of Stewart fully teaches that UL BXUV U370, point 7, teaches that this reference discloses applicant's separation wall with a 2 hour rating at 75% design load.

The declaration of Trumbo makes no mention of this reference  
Attachment C does not teach against providing this hour rating and load.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanette E. Chapman whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/  
Primary Examiner, Art Unit 3633